

CROSS TALK

Edition 86 - September 2001

Pollution Prevention Initiatives

War Against Waste Campaign

After a year of development, the new USAF solid waste management "WIN THE WAR AGAINST WASTE" outreach campaign tool kit is available for installation use. The "WIN THE WAR AGAINST WASTE" campaign will educate AF personnel, including active and civilian personnel, occupants of family housing, and school children on the importance of integrated solid waste management activities on installations throughout the Air Force.

The outreach tool kit provides environmental personnel with the tools needed to implement their own "WIN THE WAR AGAINST WASTE" campaign and includes:

- ✓ Tips for starting the campaign
- ✓ Strategies for reaching target audiences
- ✓ New campaign artwork
- ✓ Instructions for developing outreach products, complete with a CD containing necessary graphics for text files for:
 - Logo
 - Slogan
 - Magnet design ready for reproduction
 - Poster design ready for reproduction
 - Logo Sheet containing different size variations of the logo
 - Ad slick camera ready form
 - Article explaining how you can "WIN THE WAR AGAINST WASTE"
 - Web page file that can be customized to include specific information.

One campaign tool kit per installation please! Tool kits will be mailed "by request" only. To request this tool kit (binder & CD), please send the following information to Nancy.Carper@brooks.af.mil:

- ✉ Name
- ✉ Organization
- ✉ Complete mailing address
- ✉ Major Command (MAJCOM)
- ✉ Email Address
- ✉ DSN & Commercial Telephone Number

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Join the AP List Server

You can now join the affirmative procurement (AP) and environmentally preferable purchasing (EPP) list server. With the help of the Defense Environmental Network and Information Exchange (DENIX), Ms. Karen Kivela, Environmental Quality Directorate, Headquarters Air Force Center for Environmental Excellence (HQ AFCEE/EQ), DSN 240-4191, created a list server that will provide subscribers with information on AP and EPP and create a forum for ideas, discussions and a place to post questions or request resources. List membership is intended for Department of Defense (DoD) and DoD consultants but is currently available to all. To join, send a blank email message to: join-buy-green@list.denix.osd.mil.

In Our Customers Own Words...

"Another great job. I received the requested material in a timely manner with excellent PRO-ACT cooperation!"

Mr. Mark Floyd
301 SPTG/CEV
NAS Ft. Worth JRB, TX



PRO-ACT

A Base-level Pollution Prevention Resource sponsored by HQ Air Force Center for Environmental Excellence



P2-HWM Conference A Success

The 6th Annual Joint Services Pollution Prevention and Hazardous Waste Management Conference and Exhibition (P2-HWM) in San Antonio, TX was attended by more than 2100 individuals and over 250 exhibiting companies. This year's conference was hosted by the U.S. Army Environmental Center and the HQ Air Force Center for Environmental Excellence.

Industry Day was hosted on Monday, 20 August 2001. The General Session was held on Tuesday and several Special Sessions were conducted throughout this year's conference. The 2001 conference proceedings (presentation papers), briefing slides, and attendee list will be available this month on the P2-HWM conference site at <http://www.p2-hwmconference.com>.

This year's conference boasted several changes. Technical Sessions began on Monday afternoon and ended on Thursday at noon, and author-attended poster sessions were held in the exhibit hall on Wednesday in lieu of a second reception. In addition, the use of an electronic on-site registration system significantly reduced the amount of time attendees had to wait for their badges and conference materials. On-line pre-registration was available this year for both attendees and exhibitors. The pre-registration system was designed to expedite registration for future conferences by requesting a 4-digit code from each attendee. When registering for future P2-HWM conferences, attendees will be asked for name, company, and 4-digit code. The correct combination of this information will bring up their database record, allow them to make changes and easily register for the 2002 conference.

The 7th Annual Joint Services Pollution Prevention and Hazardous Waste Management Conference and Exhibition, hosted by the Air Force, will be held 19-22 August 2002 in San Antonio at the Henry B. Gonzalez Convention Center. The "Call for Abstracts" will be available for on-line submission on 3 December 2001.

CrossTalk

CrossTalk, published monthly by PRO-ACT, a service of the Environmental Quality Directorate, Headquarters Air Force Center for Environmental Excellence (HQ AFCEE/EQ), Brooks Air Force Base, Texas.

Contents of CrossTalk are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Department of the Air Force. Reference to any commercial product or company does not imply endorsement by the government or any of its agencies.

Readers may submit articles or photographs for publication. Material will be edited, however, to conform to PRO-ACT and Air Force guidelines.

Correspondence should be addressed to PRO-ACT's editorial office at 314 E. Commerce Street, Suite 200, San Antonio, TX 78205; DSN 240-4214, (800) 233-4356, or pro-act@hqafcee.brooks.af.mil.

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BMP Update

Air Force installations often identify best management practices (BMPs) that demonstrate a standard of excellence or an achievement considered best-in-class. Thank you RAF Mildenhall for submitting the environmental successes highlighted here on your Pollution Prevention and Environmental Management Program.

Pollution Prevention and Environmental Management Program RAF Mildenhall, United Kingdom

RAF Mildenhall takes an extremely proactive stance towards pollution prevention (P2) and environmental management. The overall philosophy is to eliminate or greatly reduce the use of potentially hazardous substances from impacting the installation and surrounding community. Personnel have expended much effort in finding effective ways of reducing disposal costs. Over a two year period of cooperation with the Host Nation Environmental Agency, they have eliminated 98% of their waste stream costs by redirecting a non-hazardous discharge from off-base disposal via tanker truck transport, to the foul sewer (sanitary sewer) system, resulting in a savings of approximately £120,000 annually. Next to come under review was the use of a penetrate system. A change to a recyclable penetrate eliminated another £12,000 in annual waste disposal costs.

The Mildenhall P2 Program Manager directed his efforts towards establishing a Command-first "Potential Pollutant Discharge Map." This unique home-made map consolidates oil/water separators, grease traps, catch pits, fuel/water interceptors, cess pits, septic tanks, fuel storage sites, fuel distribution lines, drinking water lines, surface water lines, foul sewer system lines, hazardous material storage areas, hazardous material handling areas, hazardous waste accumulation points, and hazardous waste storage areas onto one "Environmental Compliance" map. The map provides an up-to-date emergency response tool by identifying primary pollution sources and how they could affect other resources and/or impact the environment. Environmentally sensitive areas on and near the installation are also highlighted on the map.

An Environmental Geographic Information System (EGIS) was established to ensure all key agencies have a complete listing of asbestos locations on Base. The EGIS is also used to supply historical sample analysis information and details on all long-term monitoring wells on the installation. All aboveground and underground storage tank (AST/UST) sites are identified using EGIS. All information is shared during regularly scheduled meetings with the Host Nation Environmental Agency. Confirmation of the great working relationship with the Agency was demonstrated when RAF Mildenhall hosted a one-day symposium of over 40 United Kingdom environmental professionals to discuss the installation's restoration program. Headquarters United States Air Forces Europe (HQ USAFE) recognized RAF Mildenhall as having the best restoration program during 1999-2000.

RAF Mildenhall was the first USAFE installation to initiate a battery-recycling program. The program now includes Nickel-Cadmium (Ni-Cad), lithium, magnesium, and mercury batteries. Additionally, they were the first Base in the United Kingdom (UK) to adopt the stringent UK Special Waste regulations of 1996 and begin a fluorescent light tube and paint waste program. The 100 CES/CEV has purchased five aqueous parts washers to eliminate use of highly toxic solvents. They have placed into use numerous can crushers and aerosol depleters to reduce the volume of these hazardous waste streams.

RAF Mildenhall BMP Update Continued...

The Base has validated and funded nine surface water pollution prevention projects totaling over \$3.5 million. Works accomplished to date include repairs to sewer inlets, sewer trickling filters, and sewage treatment humus tanks, plus adding a final clarifier system, redirecting boiler house blow down discharges to the foul sewer system, and redirecting the discharge from nine cess pits and 12 septic tanks to the foul sewer system. Purchases include spill vacuums (that could produce a savings of \$26,000 over three years), a petroleum, oils, & lubricants (POL) dispensing system (estimated to save \$3.5 million over the next three years), drum funnels (savings of \$800 per year), paint gun cleaners (that could result in a savings of \$2.5 million per year), and a paint testing kit for extending the life expectancy of paints by up to three years (an estimated savings of \$10,000).

A potential problem was solved before it became an issue when the 100 CES/CEV provided an extremely cost effective solution on where to wash aircraft while repairs are being made to the existing aircraft washrack. Upon review of hardstand sites large enough to support washing aircraft, it was determined that with small modifications, an oil/water separator could be changed into a holding tank capable of containing the waste wash water. The water from the holding tank could then be pumped into the foul sewer system. This solution was estimated to save between \$105,000 to \$2.1 million over other possible solutions considered. The same solution was adopted on a smaller scale by a Naval unit and a Special Operations Group.

With the outbreak of Foot & Mouth Disease in the UK, the 100 CES/CEV faced difficult times by having to ensure the Base population the disease would not infiltrate onto the installation, and then making sure it didn't. They also had to ensure the disease was not transmitted to the United States via material and aircraft departing their installation. They coordinated and developed a comprehensive Foot & Mouth Disease management action plan with guidance from the UK Ministry of Agriculture, Fisheries and Food, and the United States Department of Agriculture. In four days they managed to determine what disinfectants would be approved for application to both UK and US assets entering both the European theater of operations and the United States. The Civil Engineering Squadron specified strict compliance requirements, through coordination with the Host Nation Environmental Agency, on where and in what quantities the disinfectant could be applied. Amounts for application to both rolling stock and aircraft were determined, and a Base map was developed showing approved storage, handling, and application areas.

For further information on the RAF Mildenhall Pollution Prevention and Environmental Management Program, contact Mr. Ken Caligiuri, Chief, Environmental Flight, 100 Civil Engineering Squadron (100 CES/CEV), DSN 314-238-5829, ken.caligiuri@mildenhall.af.mil.

We Want Your Input!

PRO-ACT is interested in your comments on our publications and services. We welcome your input regarding environmental success stories, new technologies, best management practices, and fact sheet topic ideas. We are also interested in any documents, videos, and base environmental plans that could be included in our technical library. Please contact us at DSN 240-4214 or by email at pro-act@brooks.af.mil.



Regulatory Alert!

NOx Standards Removed

The EPA announced in 66 Federal Register (FR) 42608 that certain Nitrogen Oxide (NOx) emission standards for new electric utility steam generating units and industrial-commercial-institutional steam generating units, which were promulgated on September 16, 1998 are being removed. The provisions which are being removed related to electric utility steam generating units and industrial-commercial-institutional steam generating units for which modification was commenced after July 9, 1997.

The removal of the provisions is based on the issuance of an order by the United States Court of Appeals for the District of Columbia Circuit in *Lignite Energy Council, et al., v. Environmental Protection Agency*, No. 98-1525 (and consolidated cases) on September 21, 1999. For more information, access http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2001_register&docid=fr14au01-8.pdf.

New Tools and Guidance

New Mold Detection Technology

The EPA has developed a new mold detection technology that will soon be available to indoor air quality (IAQ) professionals nationwide. The new technique provides faster sampling than any other current method. IAQ specialists can test mold samples and have the results in a few hours compared to the current several week waiting period. The suspect mold samples are analyzed based on deoxyribonucleic acid (DNA) to determine whether it is dangerous or not. For more information call the EPA at (202) 564-7842.

EnviroMapper

The EnviroMapper application tool, available at <http://maps.epa.gov/enviromapper/>, provides users with interactive Geographic Information System (GIS) functionality using EPA spatial data. It can map various types of environmental information, including air releases, drinking water, toxic releases, hazardous wastes, water discharge

permits, and Superfund sites. Select a geographic area within EnviroMapper and view the different facilities that are present within the area. Create maps at the national, state, and county levels, and link them to environmental text reports. You can even insert dynamically created maps in your own web pages. If you have a web browser, you can use EnviroMapper.

EnviroMapper allows users to view spatial data at the national, state, and county levels, as well as utilize GIS functionality, such as displaying multiple spatial layers, zooming, panning, identifying features, displaying latitude and longitude, and querying single Envirofact points.

(Adapted from EPA Internet Newsbrief)

Conference Corner

DoD Recycling Workshop

The DoD Recycling Workshop will be held during the Solid Waste Association of North America's WASTECON, 15-18 October 2001 in Baltimore, Maryland. Workshop information is posted on the HQ AFCEE/EQ website at <http://www.hqafcee.brooks.af.mil/eq/wastecon/wastecon.htm>, or contact Ms. Nancy Carper, HQ AFCEE/EQT, at DSN 240-4964 or by email at nancy.carper@brooks.af.mil.

NRC Recycling Congress

The 20th Annual National Recycling Congress (NRC) and Exposition will be held in Seattle, Washington, September 30 - October 3, 2001. "2001: A Recycling Odyssey" will be the theme for this year's Congress which will provide an informative overview of the current state of recycling and future. The White House Task Force on Recycling has teamed with the NRC to offer Federal educational sessions to Federal attendees. For registration information, visit the NRC's web site at <http://www.nrc-recycle.org>.

AWMA Conference

The Air and Waste Management Association's (AWMA) 95th Annual Conference and Exhibition will be held in Baltimore, Maryland, 23-27 June 2002. Over 5,000 environmental management

professionals from around the world are expected to attend this event. The conference provides a forum for education and cross feed among private industry, environmental pollution control officials and federal agencies such as the DoD covering environmental pollution prevention and control technology.

Abstracts of up to 300 words will be accepted for technical papers for this conference. Papers are specifically requested for Technical Topics, ES-1d, "Design for the Environment," and WR-3e, "Major DoD Site Environmental Management Successes." Papers on these subjects or any other topics included in the call for papers are being solicited at this time. Other specific sessions of possible interest include: ES-1a, "Status of Sustainable Design Programs in the Department of Defense, ES-1d, ES-2a "Implementation of Compliance through Pollution Prevention for Cleaner Production and Sustainable Development," ES-2b, "Greening of the Government: Pollution Prevention in the Federal Acquisition Process (Design in P2 from Start)." Other areas where technical papers are requested include Compliance through P2 and Leaner Manufacturing Success Stories, Sustainable Development, Air Emissions Control and Measurement, Toxic Air Pollutants, Environmental Management, Industrial Processes, and Program Administration. In order to present a paper please submit an abstract as follows:

1. Fill out the abstract submittal form located at <http://ams.cos.com/cgi-bin/login?institutionId=1785&meetingId=73>, submit it online (preferred method), due date October 1, 2001. All proposed sessions may also be viewed at the above site;
2. Download the form (MS Word) located at <http://www.awma.org/ACE2002/tech-program/default.asp>, complete and paste into the text of an email message. Make the subject of the email "Baltimore Abstracts," and send to aklaus@awma.org. Please do not send file attachments. Due date September 17, 2001; or

3. Download the form (MS Word) located at <http://www.awma.org/ACE2002/tech-program/default.asp>, complete the form, and copy to disk. Mail the disk to: Annual Meeting Technical Program Coordinator, AWMA, One Gateway Center, 3rd Floor, Pittsburgh, PA 15222. Due date September 17, 2001.

Authors will be notified of the acceptance of the abstract by AWMA in mid-November 2001. Draft papers are due mid January and final papers by mid March in order to be included in the Annual Conference Technical Program.

Technical Inquiry Roundup

TI 22839 – Ride Sharing Program

By Carl Lehman

A customer contacted PRO-ACT with a request for examples of successful ride sharing/trip reduction programs at either Air Force or Air National Guard installations. The customer stated his installation will be developing such a plan in response to a state requirement for ozone non-attainment areas. The state will require employers with over 250 employees to implement a trip reduction plan that results in a 25% reduction in the number of "drive-alone" vehicles commuting to and from the facility.

PRO-ACT provided the customer with a copy of the PRO-ACT Success Story on Luke AFB, July 2000 which contains information on Luke AFB's ride sharing program. Questions concerning the Luke AFB ride sharing/trip reduction program should be directed to Mr. Gary Ewing, Environmental Manager, DSN 896-3815, ext 234. We also forwarded ride sharing program information obtained from Los Angeles AFB, CA.

In addition, our search of the world wide web (WWW) revealed the following documents that address ride sharing/trip reduction programs and issues:

1. "Why Telecommuting Works and How Your Company will Benefit,"

2. "Federal Workforce Transportation," Executive Order 13150, 21 April 2000 ,
3. "Federal Workforce Transportation Frequently Asked Questions,"
4. "Federal Agency Brochure,"
5. "The Commuter Choice Program: A Way to Save Money and Help the Environment,"
6. "TEA-21 Continues the Current Program Structure of Three Major Programs,"
7. "H.R. 3318 - Federal Employees Clean Air Incentives Act,"
8. "Incentives to Federal Employees' Use of Public Transportation," HQ ACC/LGTV,
9. "Use of Appropriated Funds to Provide Financial Incentive to Employees for Commuting by Means other than Single-Occupant Vehicle," Comptroller General of the United States, 28 May 1993,
10. "Federal Employees Clean Air Incentive Act," SM-ALC/JAV, 29 September 1994,
11. "Transportation Incentives," HQ USAF/CV, 30 October 1995,
12. "Massachusetts Statewide Transportation Management Associations (TMA) Council,"
13. "Mass Highway Caravan for Commuters," &
14. "Commuter Programs at the Worksite," Caravan for Commuters Information Center.

TI 22958 – Chlorine Gas in Water Treatment

By Ty King

A PRO-ACT customer requested information regarding the use of chlorine gas as the disinfectant within a federally owned wastewater treatment plant. Specifically, the customer wanted to know if there is any Air Force guidance prohibiting the use of chlorine gas as a disinfectant within a federally owned treatment works (FOTW).

PRO-ACT contacted Ms. Sue Stell, Regional Environmental Office, Headquarters Air Force Center for Environmental Excellence (HQ AFCEE/CCRD), Dallas, TX, (214) 767-4070, who stated she is unaware of any Air Force regulations prohibiting the use of chlorine gas as the disinfectant within a FOTW. She suggested that, as part of the decision process of converting an existing disinfecting system, consideration should be given to the potential health hazards

associated with compressed chlorine gas.

Next, we reviewed Military Handbook (MIL-HDBK) 1005/16, "Wastewater Treatment System Design Augmenting Handbook," Table 15, which specifies feeding recommendations for chlorine gas as a disinfectant. Contained elsewhere within MIL-HDBK-1005/16 are storage and handling considerations for chlorine gas. There were no prohibitions for the use of chlorine gas.

Last, we contacted Mr. Brian Pitts, Environmental Engineer, Office of Ecosystems Protection, Region 1 Environmental Protection Agency (EPA), (617) 918-1875, who stated there are no prohibitions on the use of chlorine gas as a disinfectant. He further stated that although Region 1 EPA does not restrict the use of chlorine gas, due to technological advances, discharge permits could potentially become more restrictive on chlorine residuals in the future. These restrictions might require the implementation of a dechlorination process in order to meet discharge permit levels. He finally suggested it might be prudent to consider the cost effectiveness of installing a chlorine gas injection system versus newer technology, such as ultraviolet (UV), for disinfecting.

TI 22973 – Recycling Programs

By Pamela Jernigan

A customer contacted PRO-ACT with a request for information on recycling. The customer specifically wanted guide books, success stories, best practices, and other documents that could be of assistance in further developing the installation's recycling program.

PRO-ACT searched our world wide web (WWW) site and located the following publications that contain success stories and best practices:

1. PRO-ACT CrossTalk Edition 82, May 2001,
2. PRO-ACT CrossTalk Supplement Edition: Earth Day, April 2001,
3. PRO-ACT CrossTalk Edition 68, March 2000,

4. PRO-ACT Success Story, Spotlight on: Fairchild AFB, July 2001, <http://www.epa.gov/epaoswer/non-hw/muncpl/reduce.htm>
5. PRO-ACT Success Story, Spotlight on Elmendorf AFB, April 2001, 4. Welcome to Recycle City, EPA, <http://www.epa.gov/recyclecity/>,
6. PRO-ACT Success Story, Spotlight on RAF Lakenheath, March 2001, 5. Recycling, MSW Management, <http://www.epa.gov/epaoswer/non-hw/muncpl/recycle.htm>, and
7. PRO-ACT Success Story, Spotlight on: Grissom Air Reserve Base, January 2000, and 6. Composting, Office of Solid Waste, <http://www.epa.gov/epaoswer/non-hw/compost/index.htm>.
8. PRO-ACT Success Story, Spotlight on: Seymour-Johnson AFB, June 1999.

We next searched the Environmental Protection Agency (EPA) WWW site at <http://www.epa.gov> and located the following URLs that contain information pertinent to establishing a recycling program:

1. Wastewise, Office of Solid Waste, <http://www.epa.gov/wastewise/>,
2. Recycling Measurement, EPA, <http://www.epa.gov/epaoswer/non-hw/recycle/recmeas/index.htm>
3. Reduce, Reuse and Recycling, EPA Municipal Solid Waste (MSW) Management,

Finally, we provided copies of the following:

1. Recycling-Making a Difference for Our Environment, Department of Defense,
2. Whiteman AFB Recycling Orientation and Earth Week 1996, and
3. The Headquarters Air Force Center for Environmental Excellence (HQ AFCEE) Environmental Quality Resource Compact Disc (P2 CD), Version 6.0, August 2001.

For a copy of any document referenced in our Technical Inquiry Roundup section, please contact PRO-ACT at DSN 240-4214.



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